WHAT IS CLAIMED IS:

1. A circuit comprising:

a plurality of capacitors coupled in parallel;

a plurality of capacitor switches, each one of the capacitor switches coupled in series with a respective one of the plurality of capacitors;

one or more biasing circuits to independently set each of the plurality of capacitor switches to one of a reset voltage, a first threshold voltage, and a second threshold voltage; and

a plurality of control switches, each of the control switches to couple and to decouple a respective one of the plurality of capacitor switches to and from a control voltage.

2. A circuit according to Claim 1, further comprising one or more control biasing circuits to set the control voltage to one of the reset voltage, the first threshold voltage, and the second threshold voltage.

3. A circuit according to Claim 1, further comprising an oscillating circuit coupled to the plurality of capacitors by the plurality of capacitor switches, a frequency of oscillation of the oscillating circuit based at least on a capacitance provided to the oscillating circuit by the plurality of capacitors.

4. A circuit according to Claim 1, further comprising:

a control circuit, the control circuit to generate the control voltage.

5. A circuit according to Claim 4, further comprising:

a charge pump, the charge pump to sink or source a control current to or from the control circuit, the control circuit to generate the control voltage based at least in part on the control current.

6. A circuit according to Claim 5, further comprising:

a detector, the detector to transmit a difference signal to the charge pump, the difference signal indicating a difference between a reference signal and an output signal, wherein the output signal is based on one or more of the plurality of capacitors, and wherein the charge pump is to generate the control current based on the difference signal.

7. A circuit according to Claim 6, further comprising:

an oscillating circuit coupled to the plurality of capacitors by the plurality of capacitor switches, the oscillating circuit to output the output signal, wherein the output signal is based at least on a capacitance provided to the oscillating circuit by the plurality of capacitors.

8. A circuit according to Claim 1, wherein if a particular capacitor switch is set to the first threshold voltage, a particular capacitor coupled in series with the particular capacitor switch contributes negligibly to a total capacitance of the plurality of capacitors,

wherein if the particular capacitor switch is set to the second threshold voltage, the particular capacitor coupled in series with the particular capacitor switch contributes substantially its characteristic capacitance to the total capacitance of the plurality of capacitors, and

wherein the reset voltage is greater than the first threshold voltage and less than the second threshold voltage.

9. A method comprising:

setting a control circuit and a plurality of capacitor switches to a reset voltage, a first one of the capacitor switches coupled in series to a first capacitor of a plurality of capacitors;

coupling the first capacitor switch to the control circuit;

determining that a control voltage of the control circuit is less than a first threshold voltage, the first threshold voltage less than the reset voltage;

setting the first capacitor switch to the first threshold voltage;

uncoupling the first capacitor switch from the control circuit; and

setting the control circuit to the reset voltage.

10. A method according to Claim 9, wherein an effective capacitance of the first capacitor is substantially zero if the first capacitor switch is set to the first threshold voltage.

11. A method according to Claim 10, wherein a resistance of the first capacitor switch is substantially infinite if the first capacitor switch is set to the first threshold voltage.

12. A method according to Claim 9, further comprising:

coupling a second capacitor switch of the plurality of capacitor switches to the control circuit, the second capacitor switch coupled in series to a second capacitor;

determining that a control voltage of the control circuit is greater than a second threshold voltage, the second threshold voltage greater than the reset voltage;

setting the second capacitor switch to the second threshold voltage;

uncoupling the second capacitor switch from the control circuit; and

setting the control circuit to the reset voltage.

13. A method according to Claim 12, wherein a resistance of the second capacitor switch is substantially zero if the second capacitor switch is set to the second threshold voltage.

14. A system comprising:

a transceiver to transmit and receive data comprising a voltage-controlled oscillator, the voltage-controlled oscillator comprising:

a plurality of capacitors coupled in parallel;

a plurality of capacitor switches, each one of the capacitor switches coupled in series with a respective one of the plurality of capacitors;

one or more biasing circuits to independently set each of the plurality of capacitor switches to one of a reset voltage, a first threshold voltage, and a second threshold voltage; and

a plurality of control switches, each of the control switches to couple and to decouple a respective one of the plurality of capacitor switches to and from a control voltage;

a processor to process the data; and

a double data rate memory in communication with the processor.

15. A system according to Claim 14, further comprising:

a framer coupled to the transceiver and to the processor, the framer to decapsulate data received by the transceiver and to encapsulate data to be transmitted by the transceiver.